XP-002108925

P.D. 1998
p. 1

AN - 1998:174502 BIOSIS
DN - PREV199800174502
TI - Acclimation to freezing temperatures in perennial ryegrass (Lolium perenne.
IN - Harrison, Judith; Tonkinson, Claire; Eagles, Colin; Foyer, Christine
CS - Inst. Grassland Environmental Res., Plas Gogerddan, Aberystwyth, Ceredigion SY23 3EB UK
SO - Acta Physiologiae Plantarum, (1997) Vol. 19, No. 4, pp. 505-515. ISSN: 0137-5881.
DT - Article
LA - English
AB - The increasing demands being placed on natural grasslands in the era following the appearance of Bovine Spongiform Encephalitis require that forage crops provide a reliable extended season of growth, combined with good winter survival to ensure sward longevity. The ability to tolerate sub-zero temperatures is integral to the survival of perennial forages. Since the development of freezing tolerance is crucial to the survival and productivity of over-wintering crops, forage breeding programmes require an improved understanding of the individual characteristics that contribute to tolerance to sub-zero temperatures. Photosynthesis, carbohydrate content and changes in protein composition were investigated in two varieties of Lolium perenne which differ in their response to growth at low temperature.
CC - Agronomy - Forage Crops and Fodder *52506
External Effects - Temperature as a Primary Variable - Cold *10616
Plant Physiology, Biochemistry and Biophysics - Temperature *51503
Plant Physiology, Biochemistry and Biophysics - Photosynthesis *51506
BC - Gramineae 25305
IT - Major Concepts
Agronomy (Agriculture); Chemical Coordination and Homeostasis
IT - Miscellaneous Descriptors
carbohydrate content; freezing temperature acclimation; photosynthesis; plant breeding; protein composition
ORGN- Super Taxa
Gramineae: Monocotyledones, Angiospermae, Spermatophyta, Plantae
ORGN- Organism Name
Lolium -perenne [perennial ryegrass] (Gramineae)
ORGN- Organism Superterms
Angiosperms; Monocots; Plants; Spermatophytes; Vascular Plants